

**09380000 COLORADO RIVER AT LEES FERRY, AZ**

Upper Colorado-Dirty Devil Basin  
Lower Lake Powell Subbasin

LOCATION.--Lat 36°51'53", long 111°35'15" referenced to North American Datum of 1927, in NE ¼ SE ¼ sec.13, T.40 N., R.7 E., Coconino County, AZ, Hydrologic Unit 14070006, in Navajo Indian Reservation, on left bank at head of Marble Gorge at Lees Ferry, just upstream from Paria River, 16 mi downstream from Glen Canyon Dam, 28 mi downstream from Utah-Arizona State line, and 61.5 mi upstream from Little Colorado River.

DRAINAGE AREA.--111,800 mi<sup>2</sup>, approximately, including 3,959 mi<sup>2</sup> in Great Divide Basin in southern Wyoming, which is noncontributing (previously considered part of the Missouri River basin).

**SURFACE-WATER RECORDS**

PERIOD OF RECORD.--Jan. 1895 to current year. Estimates of monthly and annual discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 859: 1921-23. WSP 1313: 1914-21.

GAGE.--Water-stage recorder. Datum of gage is 3,106.16 ft above sea level. Prior to Jan. 19, 1923, nonrecording gages or reference points within 400 ft of present gage, at different datums.

REMARKS.--Records good. Flow regulated since Mar. 13, 1963, by Lake Powell, 16 mi upstream. Many diversions above Lake Powell for irrigation, municipal, and industrial use. No diversions or inflow between Lake Powell and the gage.

AVERAGE DISCHARGE FOR PERIOD OF RECORD.--51 years (water years 1912-62), 17,850 ft<sup>3</sup>/s, 12,930,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--1895-1962: Maximum discharge, 220,000 ft<sup>3</sup>/s June 18, 1921, gage height, 26.5 ft, from floodmarks, from rating curve extended above 120,000 ft<sup>3</sup>/s on basis of discharge computed for station near Grand Canyon; minimum, 750 ft<sup>3</sup>/s, Dec. 27, 1924.

1963 -Current year: Maximum discharge, 97,300 ft<sup>3</sup>/s June 29, 1983, gage height, 18.14 ft; minimum daily, 700 ft<sup>3</sup>/s Jan. 23, 24, 1963, result of closing coffer dam at Glen Canyon Dam.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since at least 1868, about 300,000 ft<sup>3</sup>/s, July 7, 1884, gage height, 31.5 ft, present site and datum, from floodmark at mouth of Paria River, from rating curve extended above 120,000 ft<sup>3</sup>/s on basis of discharge computed for flood of June 18, 1921, for station near Grand Canyon.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 19,200 ft<sup>3</sup>/s, Jan. 1, gage height, 10.43 ft; minimum daily discharge, 8,080 ft<sup>3</sup>/s, Sept. 25.

## 09380000 COLORADO RIVER AT LEES FERRY, AZ—Continued

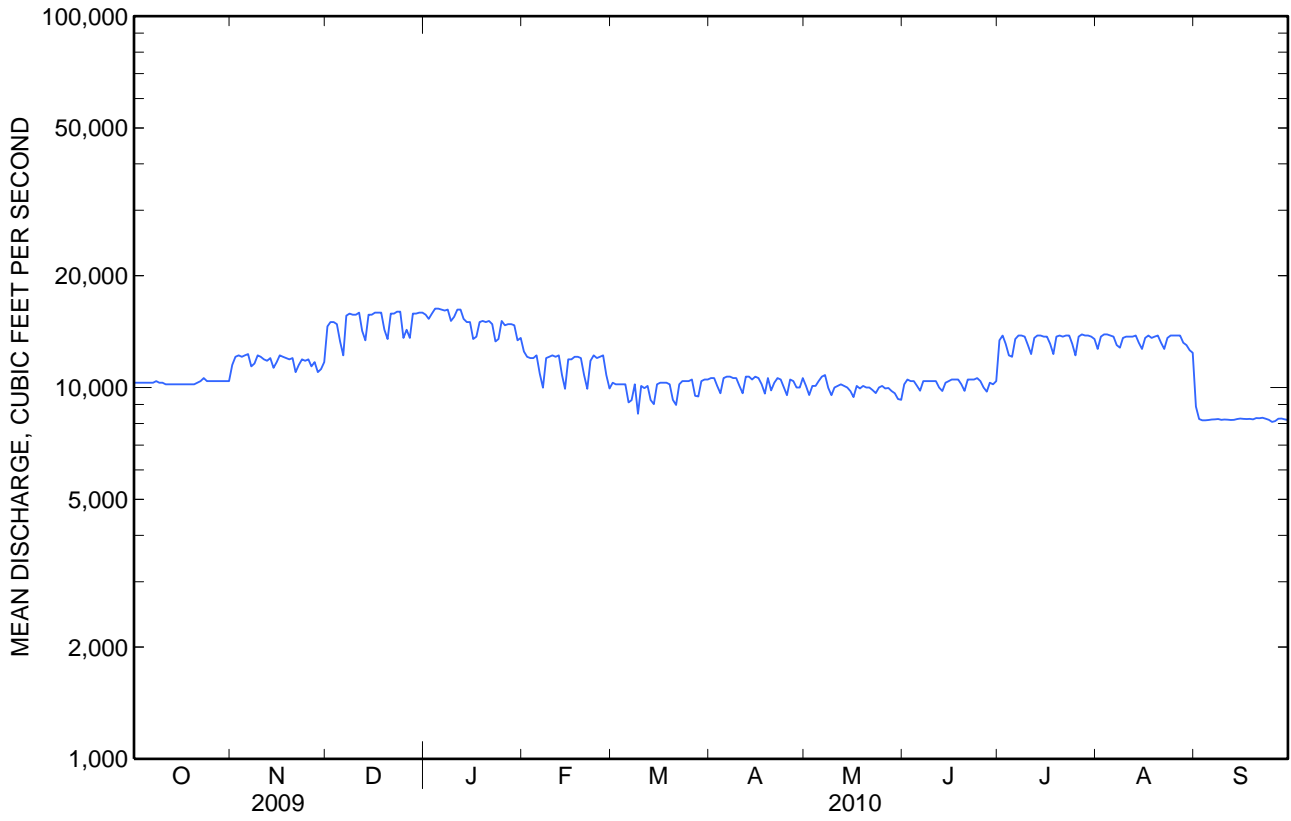
**DISCHARGE, CUBIC FEET PER SECOND**  
**WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010**  
**DAILY MEAN VALUES**

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	10,300	11,500	14,600	15,700	12,500	10,300	10,600	10,100	10,200	13,400	12,700	8,880
2	10,300	12,100	15,000	15,300	12,100	10,200	10,600	9,540	10,500	13,800	13,700	8,220
3	10,300	12,200	15,000	15,800	12,000	10,200	10,100	10,100	10,400	13,100	13,900	8,160
4	10,300	12,100	14,800	16,300	12,000	10,200	9,650	10,100	10,400	12,200	13,900	8,160
5	10,300	12,200	13,300	16,300	12,200	10,200	10,600	10,400	10,100	12,100	13,800	8,170
6	10,300	12,300	12,200	16,200	10,900	9,120	10,700	10,700	9,800	13,500	13,700	8,200
7	10,300	11,400	15,600	16,100	9,990	9,240	10,700	10,800	10,400	13,800	13,000	8,210
8	10,400	11,600	15,800	16,200	12,000	10,200	10,600	9,980	10,400	13,800	12,800	8,220
9	10,300	12,200	15,700	15,100	12,100	8,500	10,600	9,530	10,400	13,700	13,600	8,180
10	10,300	12,100	15,700	15,500	12,200	10,100	10,100	10,000	10,400	13,000	13,700	8,200
11	10,200	11,900	15,900	16,200	12,100	9,960	9,650	10,100	10,400	12,300	13,700	8,190
12	10,200	11,800	14,200	16,200	12,200	10,100	10,700	10,200	10,000	13,600	13,700	8,170
13	10,200	12,000	13,400	15,300	10,800	9,250	10,700	10,100	9,780	13,800	13,800	8,180
14	10,200	11,300	15,700	15,000	9,920	9,020	10,500	10,000	10,300	13,800	13,200	8,220
15	10,200	11,700	15,700	15,000	11,900	10,200	10,700	9,770	10,400	13,700	12,700	8,250
16	10,200	12,200	15,900	13,500	11,900	10,300	10,600	9,420	10,500	13,700	13,600	8,230
17	10,200	12,100	15,900	13,700	12,100	10,300	10,200	10,100	10,500	13,100	13,800	8,220
18	10,200	12,000	15,900	15,000	12,100	10,300	9,630	9,940	10,500	12,300	13,600	8,230
19	10,200	11,900	14,300	15,100	12,000	10,200	10,600	10,100	10,200	13,700	13,700	8,210
20	10,200	12,000	13,500	15,000	10,800	9,260	9,820	10,000	9,790	13,800	13,800	8,270
21	10,300	11,000	15,800	15,100	9,920	8,970	10,300	10,000	10,500	13,700	13,200	8,260
22	10,400	11,500	15,800	14,800	11,800	10,200	10,600	9,840	10,500	13,800	12,700	8,290
23	10,600	11,900	16,000	13,300	12,200	10,400	10,500	9,660	10,500	13,800	13,600	8,240
24	10,400	11,800	16,000	13,500	12,000	10,400	10,000	10,000	10,600	13,100	13,800	8,180
25	10,400	11,900	13,600	15,100	12,100	10,400	9,530	10,100	10,400	12,200	13,800	8,080
26	10,400	11,400	14,300	14,700	12,200	10,500	10,500	9,940	10,000	13,700	13,800	8,120
27	10,400	11,700	13,600	14,800	10,800	9,490	10,400	9,970	9,740	13,900	13,800	8,240
28	10,400	11,000	15,800	14,800	9,940	9,460	10,000	9,780	10,300	13,800	13,200	8,250
29	10,400	11,200	15,800	14,700	---	10,400	10,000	9,650	10,200	13,800	13,000	8,210
30	10,400	11,700	15,900	13,400	---	10,500	10,600	9,310	10,400	13,700	12,600	8,170
31	10,400	---	15,900	13,600	---	10,500	---	9,260	---	13,500	12,400	---
<b>Total</b>	319,600	353,700	466,600	466,300	324,770	308,370	309,780	308,490	308,510	415,200	416,300	246,810
<b>Mean</b>	10,310	11,790	15,050	15,040	11,600	9,947	10,330	9,951	10,280	13,390	13,430	8,227
<b>Max</b>	10,600	12,300	16,000	16,300	12,500	10,500	10,700	10,800	10,600	13,900	13,900	8,880
<b>Min</b>	10,200	11,000	12,200	13,300	9,920	8,500	9,530	9,260	9,740	12,100	12,400	8,080
<b>Med</b>	10,300	11,900	15,700	15,100	12,000	10,200	10,500	10,000	10,400	13,700	13,700	8,210
<b>Ac-ft</b>	633,900	701,600	925,500	924,900	644,200	611,700	614,400	611,900	611,900	823,500	825,700	489,500
<b>Cfsm</b>	0.09	0.11	0.13	0.13	0.10	0.09	0.09	0.09	0.09	0.12	0.12	0.07

CAL YR 2009 TOTAL 4267860 MEAN 11690 MAX 16000 MIN 7960 MED 11100 AC-FT 8465000 CFSM 0.10

WTR YR 2010 TOTAL 4244430 MEAN 11630 MAX 16300 MIN 8080 MED 10700 AC-FT 8419000 CFSM 0.10

09380000 COLORADO RIVER AT LEES FERRY, AZ—Continued



**09380000 COLORADO RIVER AT LEES FERRY, AZ—Continued****WATER-QUALITY RECORDS**

PERIOD OF RECORD.--Jan. to July 1926, Oct. 1926 to June 1927, Aug. 1928 to Dec. 1933, Nov. 1942 to Oct. 1945, Oct. 1947 to current year.

PERIOD OF DAILY RECORD.--SPECIFIC CONDUCTANCE: Oct. 1964 to Sept. 1981, Feb. 1982 to Dec. 1987, Oct. 1989 to Mar. 2003., Feb. 2004 to current year.

pH: Aug. 1990 to Apr. 1993.

WATER TEMPERATURE: July 1949 to Sept. 1981, Feb. 1982 to Dec. 1987, Oct. 1989 to Mar. 2003, Feb. 2004 to current year.

DISSOLVED OXYGEN: Aug. 1990 to Apr. 1993.

SUSPENDED-SEDIMENT DISCHARGE: Oct. 1928 to Dec. 1933, Nov. 1942 to Sept. 1944, Oct. 1947 to Sept. 1965.

TURBIDITY: Oct. 1998 to Sept. 2000, minimum daily values.

INSTRUMENTATION.--Specific conductance and water temperature recorder Mar. 1977 to Sept. 1981, Feb. 1982 to Dec. 1987, and Oct. 1990 to current; dissolved-oxygen recorder Aug. 1990 to Apr. 1993.

REMARKS.--Daily water temperature and specific conductance records good. Unpublished daily specific conductance measurements for period Nov. 1942 Oct. 1947 to Sept. 1964 available from District Office in Tucson, AZ. Extreme value for the period of record include only those obtained after a normal flow release pattern from Glen Canyon Dam was started after July 31, 1965.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: (Aug. 1965 to Sept. 1981, Feb. 1982 to Dec. 1987, Oct. 1990 to current year).-Maximum, 1,260 microsiemens, Apr. 20,21, 1967; minimum, 460 microsiemens, Aug. 10, 1965.

pH: Maximum 8.3, on many days in Jan. to Apr. and June 1991;-Minimum 7.6, on several days in Nov. and Dec. 1990, and Mar. 1991.

WATER TEMPERATURE: (Aug. 1965 to Sept. 1981, Feb. 1982 to Dec. 1987, Oct. 1990 to current year).-Maximum, 21.0 C on several days during Aug., 1967, 1968;-Minimum, 2.0 C on Jan. 29, 30, 1970.

DISSOLVED OXYGEN:-Maximum recorded, 11.2 mg/L, Apr. 29, 1991;-Minimum recorded, 6.4 mg/L, Sept. 18, 1991.

TURBIDITY:-Minimum daily, less than 1.0 NTU on most days.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 941 microsiemens/cm, Apr. 26; minimum, 596 microsiemens/cm, on several days.

WATER TEMPERATURE: Maximum, 12.1°C, Nov. 29, 30; minimum, 7.2°C, Apr. 7.

**WATER-QUALITY DATA****WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010**

Part 1 of 7

[%, percent; CaCO<sub>3</sub>, calcium carbonate; MF, membrane filter; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; col/100 mL, colonies per 100 milliliters; ft<sup>3</sup>/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than; E, estimated; k, counts outside acceptable range]

Date	Sample start time	Medium name	Sample type	Barometric pressure, mm Hg (00025)	Temperature, air, °C (00020)	Discharge, instantaneous, ft <sup>3</sup> /s (00061)	Dissolved oxygen, water, unfiltered, mg/L (00300)	Dissolved oxygen, water, unfiltered, % saturation (00301)	pH, water, unfiltered, field, standard units (00400)	Specific conductance, water, unfiltered, µS/cm at 25 °C (00095)
12-10-2009	1610	Surface water	Regular	674	2.5	15,800	7.2	73	8.2	672
03-04-2010	1420	Surface water	Regular	675	13.3	12,100	8.6	83	8.0	721
05-11-2010	1605	Surface water	Regular	677	10.0	12,400	9.3	90	7.5	769
08-23-2010	1455	Surface water	Regular	684	32.8	16,100	8.0	81	8.1	702

## 09380000 COLORADO RIVER AT LEES FERRY, AZ—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010**

Part 2 of 7

[%, percent; CaCO<sub>3</sub>, calcium carbonate; MF, membrane filter; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; col/100 mL, colonies per 100 milliliters; ft<sup>3</sup>/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than; E, estimated; k, counts outside acceptable range]

Date	Temperature, water, °C (00010)	Turbidity, water, unfiltered, broad band light source (400-680 nm), detectors at multiple angles including 90 +/- 30 degrees, ratiometric correction, NTRU (63676)	Dissolved solids dried at 180 °C, water, filtered, mg/L (70300)	Dissolved solids, water, filtered, sum of constituents, milligrams per liter (70301)	Dissolved solids, water, filtered, tons per acre-foot (70303)	Hardness, water, mg/L as CaCO <sub>3</sub> (00900)	Noncarbonate hardness, water, filtered, field, milligrams per liter as calcium carbonate (00904)		Suspended solids, water, unfiltered, mg/L (00530)	Calcium, water, filtered, mg/L (00915)
12-10-2009	10.3	< 2.0	430	E 410	.59	227	97	< 15	58.6	
03-04-2010	8.1	E .7	473	435	.64	230	101	< 15	59.0	
05-11-2010	8.7	< 2.0	495	E 469	.67	257	125	< 15	68.1	
08-23-2010	11.0	< 2.0	446	E 418	.61	227	100	< 15	58.1	

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010**

Part 3 of 7

[%, percent; CaCO<sub>3</sub>, calcium carbonate; MF, membrane filter; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; col/100 mL, colonies per 100 milliliters; ft<sup>3</sup>/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than; E, estimated; k, counts outside acceptable range]

Date	Calcium, water, unfiltered, recoverable, mg/L (00916)	Magnesium, water, filtered, mg/L (00925)	Magnesium, water, unfiltered, recoverable, mg/L (00927)	Potassium, water, filtered, mg/L (00935)	Sodium adsorption ratio, water, number (00931)	Sodium, water, filtered, mg/L (00930)	Alkalinity, water, filtered, inflection-point, incremental titration method, field, mg/L as CaCO <sub>3</sub> (39086)		Carbonate, water, filtered, inflection-point, incremental titration method, field, mg/L (00452)
							Bicarbonate, water, filtered, inflection-point, incremental titration method, field, mg/L (00453)		
12-10-2009	55.0	19.6	18.7	2.93	1.42	49.1	131	158	< 1
03-04-2010	61.7	19.9	20.1	3.10	1.57	54.7	130	156	< 1
05-11-2010	63.9	21.1	20.5	3.02	1.71	63.1	133	161	< 1
08-23-2010	59.4	19.9	19.3	3.06	1.56	53.9	127	152	1

## 09380000 COLORADO RIVER AT LEES FERRY, AZ—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010**

Part 4 of 7

[%, percent; CaCO<sub>3</sub>, calcium carbonate; MF, membrane filter; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; col/100 mL, colonies per 100 milliliters; ft<sup>3</sup>/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; μS/cm, microsiemens per centimeter; μg/L, micrograms per liter; <, less than; E, estimated; k, counts outside acceptable range]

Date	Chloride, water, filtered, mg/L (00940)	Fluoride, water, filtered, mg/L (00950)	Sulfate, water, filtered, mg/L (00945)	Ammonia plus organic nitrogen, water, unfiltered, mg/L as N (00625)		Nitrate plus nitrite, water, filtered, mg/L as N (00631)	Organic nitrogen, water, unfiltered, mg/L (00605)	Phosphorus, water, unfiltered, mg/L as P (00665)	Total nitrogen, water, unfiltered, mg/L (00600)	Esche- richia coli, modified m-TEC MF method, water, col/100 mL (90902)
				Ammonia, water, filtered, mg/L as N (00608)	Ammonia, water, filtered, mg/L as N (00608)					
12-10-2009	38.5	.24	161	.19	.049	.27	.14	< .02	.45	< 1 k
03-04-2010	44.9	.27	175	.18	< .020	.30	< .18	< .02	.48	< 1 k
05-11-2010	48.9	.31	184	.17	< .020	.30	< .17	E .01	.46	< 1 k
08-23-2010	40.8	.27	165	.17	< .020	.25	< .17	< .02	.42	< 1 k

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010**

Part 5 of 7

[%, percent; CaCO<sub>3</sub>, calcium carbonate; MF, membrane filter; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; col/100 mL, colonies per 100 milliliters; ft<sup>3</sup>/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; μS/cm, microsiemens per centimeter; μg/L, micrograms per liter; <, less than; E, estimated; k, counts outside acceptable range]

Date	Barium, water, unfiltered, recover- able, μg/L (01007)	Beryllium, water, filtered, μg/L (01010)	Beryllium, water, unfiltered, recover- able, μg/L (01012)	Cadmium, water, filtered, μg/L (01025)	Cadmium, water, unfiltered, μg/L (01027)	Chromium, water, unfiltered, recover- able, μg/L (01034)	Copper, water, filtered, μg/L (01040)	Copper, water, unfiltered, recover- able, μg/L (01042)	Lead, water, filtered, μg/L (01049)	Lead, water, unfiltered, recover- able, μg/L (01051)
03-04-2010	83.5	< .01	< .04	.05	E .02	< .42	1.2	E 1.1	.06	.11
05-11-2010	84.7	< .01	< .04	.03	< .04	.43	1.8	E .94	.08	.10
08-23-2010	87.0	< .01	< .04	E .01	< .04	< .42	E .86	E 1.1	.10	.38

## 09380000 COLORADO RIVER AT LEES FERRY, AZ—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010**

Part 6 of 7

[%, percent; CaCO<sub>3</sub>, calcium carbonate; MF, membrane filter; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; col/100 mL, colonies per 100 milliliters; ft<sup>3</sup>/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; μS/cm, microsiemens per centimeter; μg/L, micrograms per liter; <, less than; E, estimated; k, counts outside acceptable range]

Date	Manganese, water, unfiltered, recoverable, μg/L (01055)	Mercury, water, filtered, μg/L (71890)	Mercury, water, unfiltered, recoverable, μg/L (71900)	Zinc, water, filtered, μg/L (01090)	Zinc, water, unfiltered, recoverable, μg/L (01092)	Antimony, water, filtered, μg/L (01095)	Antimony, water, unfiltered, micrograms per liter (01097)	Arsenic, water, filtered, μg/L (01000)	Arsenic, water, unfiltered, μg/L (01002)	Boron, water, unfiltered, recoverable, micrograms per liter (01022)
12-10-2009	1.6	< .010	< .010	< 2.8	< 2.0	.25	E .2	1.5	1.6	66
03-04-2010	1.1	< .010	< .010	< 2.8	E 1.2	.23	E .2	1.5	1.7	63
05-11-2010	1.3	< .010	< .010	E 1.7	< 2.0	.19	E .2	1.4	1.6	69
08-23-2010	1.5	< .010	< .010	E 2.2	4.4	.19	E .2	1.3	1.9	68

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010**

Part 7 of 7

[%, percent; CaCO<sub>3</sub>, calcium carbonate; MF, membrane filter; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; col/100 mL, colonies per 100 milliliters; ft<sup>3</sup>/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; μS/cm, microsiemens per centimeter; μg/L, micrograms per liter; <, less than; E, estimated; k, counts outside acceptable range]

Date	Selenium, water, unfiltered, μg/L (01147)	Suspended sediment concentration, mg/L (80154)	Suspended sediment discharge, tons per day (80155)
12-10-2009	1.6	3	128
03-04-2010	1.4	1	33
05-11-2010	1.6	2	67
08-23-2010	1.5	2	87

## 09380000 COLORADO RIVER AT LEES FERRY, AZ—Continued

**SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS  
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010**

<b>Day</b>	<b>Max</b>	<b>Min</b>	<b>Mean</b>	<b>Max</b>	<b>Min</b>	<b>Mean</b>	<b>Max</b>	<b>Min</b>	<b>Mean</b>	<b>Max</b>	<b>Min</b>	<b>Mean</b>
	<b>October</b>			<b>November</b>			<b>December</b>			<b>January</b>		
<b>1</b>	735	699	715	702	689	697	652	645	649	608	596	600
<b>2</b>	720	693	698	708	688	698	659	651	654	617	607	612
<b>3</b>	701	691	694	693	682	689	656	649	652	616	610	613
<b>4</b>	728	701	719	694	682	688	652	643	648	613	603	609
<b>5</b>	743	718	728	694	684	688	646	638	643	603	598	600
<b>6</b>	719	691	704	689	680	686	655	637	641	599	597	599
<b>7</b>	715	686	699	686	676	682	662	647	655	599	597	598
<b>8</b>	704	690	696	692	682	686	681	657	666	598	596	597
<b>9</b>	716	704	713	691	679	688	704	681	692	607	597	601
<b>10</b>	712	698	704	697	682	689	683	662	672	607	599	601
<b>11</b>	710	698	702	695	679	687	662	647	658	601	596	599
<b>12</b>	710	702	706	688	678	682	647	631	640	599	596	597
<b>13</b>	704	694	698	685	677	681	637	627	631	599	596	598
<b>14</b>	704	692	698	690	677	685	650	633	642	605	598	601
<b>15</b>	711	696	702	696	681	688	644	633	638	609	600	603
<b>16</b>	710	693	699	695	680	687	640	633	637	616	605	610
<b>17</b>	704	696	698	687	675	681	634	621	629	617	604	611
<b>18</b>	700	690	693	679	665	671	623	613	619	619	606	611
<b>19</b>	697	686	692	674	660	668	615	608	610	632	615	623
<b>20</b>	700	696	698	673	662	666	615	608	612	625	608	614
<b>21</b>	703	697	699	673	666	669	616	612	614	---	---	---
<b>22</b>	701	693	697	673	664	669	614	606	610	---	---	---
<b>23</b>	698	688	692	671	664	668	615	608	611	---	---	---
<b>24</b>	702	691	694	668	657	664	632	613	620	---	---	---
<b>25</b>	699	693	695	666	657	660	616	605	610	---	---	---
<b>26</b>	707	694	701	663	657	659	620	605	616	---	---	---
<b>27</b>	699	689	694	663	656	659	618	606	611	---	---	---
<b>28</b>	698	690	694	664	654	659	607	601	604	695	670	675
<b>29</b>	701	692	696	656	644	651	606	596	600	670	658	666
<b>30</b>	698	691	694	651	643	647	604	596	598	662	648	657
<b>31</b>	701	689	693	---	---	---	604	596	598	648	630	641
<b>Month</b>	743	686	700	708	643	676	704	596	632	---	---	---



## 09380000 COLORADO RIVER AT LEES FERRY, AZ—Continued

**SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS  
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	February			March			April			May		
<b>1</b>	657	630	645	735	723	730	809	784	802	---	---	---
<b>2</b>	683	656	667	731	717	724	817	802	809	801	785	793
<b>3</b>	680	665	674	725	710	719	802	776	788	791	762	773
<b>4</b>	672	656	664	717	710	712	792	785	790	---	---	---
<b>5</b>	657	651	655	748	711	728	813	789	802	---	---	---
<b>6</b>	655	637	645	749	715	735	820	810	817	782	762	769
<b>7</b>	652	635	640	740	724	732	818	791	809	782	742	759
<b>8</b>	680	651	665	740	725	733	793	777	785	780	759	773
<b>9</b>	688	678	684	747	730	740	800	782	792	771	749	763
<b>10</b>	698	682	689	763	732	746	797	770	786	767	755	762
<b>11</b>	687	674	681	770	736	757	779	770	776	767	755	761
<b>12</b>	685	673	678	776	744	763	787	767	773	789	745	770
<b>13</b>	685	673	678	781	772	776	801	768	784	780	751	765
<b>14</b>	685	671	675	799	771	783	794	755	777	757	745	750
<b>15</b>	704	673	690	788	754	774	783	767	778	759	731	745
<b>16</b>	716	692	708	778	763	771	781	774	777	756	738	749
<b>17</b>	718	708	714	775	766	770	781	772	777	746	737	740
<b>18</b>	709	700	704	771	758	764	775	763	770	760	729	744
<b>19</b>	701	685	692	771	757	763	767	762	764	758	734	748
<b>20</b>	692	681	688	777	751	768	769	761	765	762	731	752
<b>21</b>	713	685	698	772	751	761	772	761	766	744	726	735
<b>22</b>	728	699	714	777	766	772	790	769	779	754	726	737
<b>23</b>	729	699	714	778	766	770	784	747	763	757	728	741
<b>24</b>	723	709	715	776	753	764	791	761	778	766	735	752
<b>25</b>	736	719	728	783	752	771	---	---	---	750	699	728
<b>26</b>	724	715	720	800	780	793	---	---	---	760	727	741
<b>27</b>	724	713	718	801	777	794	---	---	---	743	726	735
<b>28</b>	727	719	721	805	776	783	---	---	---	743	724	737
<b>29</b>	---	---	---	811	791	800	---	---	---	758	737	747
<b>30</b>	---	---	---	791	781	785	---	---	---	763	724	735
<b>31</b>	---	---	---	787	777	781	---	---	---	772	674	723
<b>Month</b>	736	630	688	811	710	760	---	---	---	---	---	---

## 09380000 COLORADO RIVER AT LEES FERRY, AZ—Continued

**SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS  
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	June			July			August			September		
<b>1</b>	738	706	721	699	681	688	718	675	695	704	670	687
<b>2</b>	738	708	725	703	683	692	698	676	690	693	667	685
<b>3</b>	744	700	730	710	684	699	701	683	694	702	681	690
<b>4</b>	738	716	730	707	690	697	710	691	702	693	676	684
<b>5</b>	739	712	727	720	680	701	705	685	695	683	674	678
<b>6</b>	727	708	720	712	674	690	701	682	689	680	672	677
<b>7</b>	728	708	718	706	689	695	703	677	690	688	671	678
<b>8</b>	731	707	719	704	690	697	707	679	692	677	664	671
<b>9</b>	722	695	708	703	690	696	704	676	692	681	662	674
<b>10</b>	724	700	714	702	684	693	696	676	684	687	675	679
<b>11</b>	717	700	707	703	676	690	695	678	687	691	672	681
<b>12</b>	708	672	698	703	676	688	701	684	692	679	670	674
<b>13</b>	713	673	700	699	683	692	702	680	694	680	669	675
<b>14</b>	714	682	698	701	669	689	702	673	685	683	675	680
<b>15</b>	722	688	707	697	671	682	703	689	696	682	675	679
<b>16</b>	705	665	686	694	686	691	710	685	696	681	674	677
<b>17</b>	720	697	710	708	686	692	694	680	687	678	666	673
<b>18</b>	712	680	697	710	674	693	696	675	689	678	668	673
<b>19</b>	713	690	704	703	684	698	698	667	684	679	673	676
<b>20</b>	698	668	684	702	677	689	698	682	690	678	672	675
<b>21</b>	696	677	685	707	678	691	696	682	688	691	674	680
<b>22</b>	708	660	685	707	673	691	686	680	683	691	674	680
<b>23</b>	701	645	668	702	671	687	696	676	687	688	669	679
<b>24</b>	705	668	688	704	691	698	689	673	684	696	669	684
<b>25</b>	707	695	700	702	679	690	697	674	686	691	667	681
<b>26</b>	719	678	692	710	685	694	688	663	677	684	663	672
<b>27</b>	703	682	694	704	671	688	688	674	684	674	667	671
<b>28</b>	707	679	689	704	679	692	695	680	688	672	664	668
<b>29</b>	695	680	688	698	678	687	698	672	689	675	667	669
<b>30</b>	699	681	689	710	684	699	704	672	690	679	667	670
<b>31</b>	---	---	---	708	686	696	711	682	698	---	---	---
<b>Month</b>	744	645	703	720	669	692	718	663	690	704	662	677

## 09380000 COLORADO RIVER AT LEES FERRY, AZ—Continued

**TEMPERATURE, WATER, DEGREES CELSIUS**  
**WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	October			November			December			January		
<b>1</b>	10.8	9.9	10.2	11.7	11.0	11.4	11.9	11.6	11.8	9.8	9.5	9.7
<b>2</b>	11.6	10.1	10.7	11.9	11.2	11.6	11.7	11.2	11.5	9.6	9.4	9.5
<b>3</b>	11.6	10.6	11.2	12.0	11.4	11.7	11.6	11.2	11.4	9.5	9.2	9.4
<b>4</b>	11.6	10.7	11.1	11.8	11.3	11.6	11.6	11.0	11.3	9.5	9.2	9.4
<b>5</b>	10.7	9.7	10.2	11.7	11.3	11.5	11.7	11.3	11.5	9.6	9.2	9.4
<b>6</b>	10.9	9.8	10.4	12.0	11.2	11.6	11.6	11.1	11.3	9.5	9.2	9.4
<b>7</b>	11.6	10.4	11.0	11.8	11.4	11.6	11.1	10.7	10.9	9.5	9.2	9.4
<b>8</b>	11.3	10.6	11.0	11.7	11.3	11.5	11.0	10.0	10.6	9.3	9.1	9.2
<b>9</b>	11.3	10.4	10.9	11.4	11.0	11.2	10.1	9.5	9.8	9.2	8.9	9.1
<b>10</b>	11.1	10.4	10.8	11.4	10.9	11.2	10.5	9.9	10.2	9.2	8.9	9.1
<b>11</b>	11.3	10.4	10.9	11.5	11.1	11.3	10.7	10.1	10.4	9.2	8.9	9.1
<b>12</b>	11.3	10.6	11.0	11.5	11.0	11.2	11.0	10.6	10.8	9.2	8.8	9.1
<b>13</b>	11.2	10.7	11.0	11.3	11.0	11.1	11.0	10.8	10.9	9.1	8.8	9.0
<b>14</b>	11.3	10.7	11.0	11.1	10.4	10.7	10.8	10.5	10.6	9.0	8.8	8.9
<b>15</b>	11.3	10.7	11.0	10.5	9.8	10.1	10.7	10.2	10.5	9.1	8.7	8.9
<b>16</b>	11.3	10.7	11.0	10.7	9.9	10.3	10.6	10.3	10.5	9.0	8.7	8.9
<b>17</b>	11.4	10.6	11.0	11.1	10.2	10.6	10.8	10.3	10.5	8.9	8.6	8.8
<b>18</b>	11.6	10.8	11.2	11.5	10.6	11.0	10.9	10.5	10.7	8.8	8.7	8.8
<b>19</b>	11.8	11.2	11.5	11.7	11.0	11.3	10.8	10.5	10.7	8.9	8.7	8.8
<b>20</b>	11.6	10.9	11.1	11.6	11.2	11.4	10.7	10.4	10.5	8.9	8.7	8.8
<b>21</b>	11.2	10.8	11.0	11.5	11.1	11.3	10.6	10.3	10.5	8.8	8.4	8.6
<b>22</b>	11.3	10.8	11.0	11.6	11.0	11.3	10.6	10.3	10.5	8.7	8.4	8.5
<b>23</b>	11.5	10.8	11.2	11.6	11.0	11.2	10.6	10.2	10.4	8.6	8.4	8.5
<b>24</b>	11.5	10.8	11.2	11.6	10.8	11.2	10.4	9.9	10.1	8.4	7.9	8.2
<b>25</b>	11.8	11.2	11.4	11.7	11.0	11.3	10.3	10.0	10.1	8.4	8.0	8.2
<b>26</b>	11.2	10.6	11.0	11.7	11.2	11.4	10.2	9.9	10.0	8.5	8.0	8.3
<b>27</b>	11.2	10.9	11.1	11.8	11.2	11.5	10.1	9.8	9.9	8.3	8.1	8.2
<b>28</b>	10.9	10.4	10.7	11.8	11.3	11.6	10.1	9.8	10	8.5	8.2	8.4
<b>29</b>	10.9	10.4	10.6	12.1	11.6	11.9	10.2	9.9	10.1	8.5	8.1	8.3
<b>30</b>	11.7	10.5	11.0	12.1	11.6	11.9	10.0	9.8	9.9	8.5	8.3	8.4
<b>31</b>	11.7	11.2	11.5	---	---	---	9.9	9.7	9.8	8.7	8.4	8.5
<b>Month</b>	11.8	9.7	11.0	12.1	9.8	11.3	11.9	9.5	10.6	9.8	7.9	8.9

## 09380000 COLORADO RIVER AT LEES FERRY, AZ—Continued

**TEMPERATURE, WATER, DEGREES CELSIUS**  
**WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	February			March			April			May		
1	8.5	8.2	8.4	8.4	7.7	8.1	8.2	7.5	7.8	8.9	7.8	8.4
2	8.4	8.0	8.2	8.3	7.8	8.1	8.4	7.3	7.9	8.5	7.7	8.1
3	8.3	7.9	8.1	8.5	7.8	8.2	8.7	7.7	8.2	9.3	7.8	8.5
4	8.4	7.9	8.2	8.4	7.9	8.1	8.7	7.7	8.2	9.4	8.0	8.7
5	8.5	8.1	8.3	8.4	7.6	8.0	8.6	7.7	8.2	9.7	8.0	8.8
6	8.6	8.3	8.4	8.4	7.8	8.1	8.2	7.3	7.8	9.5	8.3	8.9
7	8.5	8.3	8.4	8.4	7.9	8.1	8.5	7.2	7.9	9.6	8.0	8.7
8	8.6	8.1	8.3	8.6	7.9	8.2	8.9	7.6	8.2	9.3	8.0	8.7
9	8.3	8.0	8.2	8.4	7.8	8.0	8.8	7.6	8.2	9.7	8.2	8.9
10	8.4	8.0	8.2	8.1	7.7	7.9	8.8	7.9	8.3	9.6	8.2	8.9
11	8.4	7.9	8.1	8.3	7.3	7.8	9.0	8.0	8.5	9.1	8.2	8.7
12	8.4	8.0	8.2	8.4	7.6	8.0	9.0	8.2	8.6	9.1	7.8	8.4
13	8.5	7.9	8.2	8.3	7.6	8.0	8.9	7.8	8.3	8.9	8.2	8.6
14	8.5	8.0	8.2	8.1	7.5	7.8	9.2	7.7	8.4	9.2	8.3	8.7
15	8.4	8.0	8.2	8.5	7.7	8.1	9.0	7.9	8.5	9.8	8.2	9.0
16	8.3	7.8	8.1	8.5	7.7	8.2	8.7	7.9	8.3	9.8	8.4	9.1
17	8.3	7.8	8.0	8.6	7.7	8.2	9.1	7.9	8.5	9.7	8.7	9.2
18	8.4	7.8	8.1	8.6	7.7	8.2	9.2	8.0	8.6	9.8	8.5	9.1
19	8.5	8.0	8.2	8.5	7.8	8.2	9.1	8.2	8.7	10.0	8.3	9.2
20	8.3	8.0	8.1	8.6	7.5	8.1	9.3	8.2	8.7	9.5	8.5	9.0
21	8.5	7.9	8.2	8.7	7.7	8.3	9.2	8.4	8.7	10.1	8.6	9.3
22	8.2	7.8	8.0	8.7	7.8	8.3	8.5	7.6	8.1	9.9	8.8	9.4
23	8.2	7.6	7.9	8.6	7.8	8.2	8.9	7.9	8.3	9.8	8.4	9.0
24	8.2	7.8	8.0	8.7	7.5	8.2	9.0	7.8	8.4	9.2	8.3	8.7
25	8.4	7.7	8.0	8.6	7.8	8.2	9.0	7.9	8.5	9.9	8.4	9.1
26	8.3	7.7	8.0	8.4	7.7	8.1	9.4	7.9	8.6	9.9	8.2	9.1
27	8.3	7.8	8.1	8.6	7.4	8.0	9.1	8.1	8.6	10.0	8.5	9.2
28	8.4	7.9	8.2	8.7	7.7	8.2	9.5	8.0	8.7	10.2	8.7	9.5
29	---	---	---	8.6	7.5	8.1	9.0	7.8	8.0	9.6	8.4	9.1
30	---	---	---	8.8	7.8	8.3	8.7	7.4	8.0	9.9	8.5	9.2
31	---	---	---	8.6	8.0	8.3	---	---	---	10.1	8.5	9.3
<b>Month</b>	8.6	7.6	8.2	8.8	7.3	8.1	9.5	7.2	8.3	10.2	7.7	8.9

## 09380000 COLORADO RIVER AT LEES FERRY, AZ—Continued

**TEMPERATURE, WATER, DEGREES CELSIUS**  
**WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	June			July			August			September		
1	9.8	8.7	9.2	10.7	10.0	10.3	10.3	9.6	10	11.3	9.8	10.5
2	10.2	8.7	9.4	11.0	9.7	10.3	11.3	9.8	10.4	11.2	10.5	10.9
3	10.0	8.7	9.4	11.1	9.4	10.1	11.1	9.7	10.4	11.2	10.4	10.9
4	10.2	8.9	9.6	10.9	9.4	10.0	10.8	9.8	10.3	11.4	10.5	11.0
5	10.4	8.8	9.7	11.3	9.3	10.1	11.3	9.8	10.5	11.7	10.7	11.2
6	10.4	8.8	9.7	11.0	9.5	10.3	11.0	9.8	10.4	11.7	10.9	11.3
7	10.3	8.9	9.6	10.8	9.8	10.2	10.7	9.7	10.1	11.4	10.4	10.8
8	10.3	8.8	9.6	10.8	9.6	10.2	10.9	9.6	10.2	11.8	10.8	11.2
9	10.7	8.9	9.8	10.9	9.6	10.2	10.9	9.7	10.2	11.7	11.1	11.4
10	10.5	9.0	9.8	11.2	9.9	10.5	11.2	9.9	10.5	11.3	10.5	10.9
11	9.9	9.0	9.3	10.9	10.0	10.4	11.4	10.0	10.6	11.3	10.0	10.8
12	9.4	8.8	9.1	11.1	9.7	10.4	11.0	10.1	10.5	11.4	10.8	11.1
13	9.6	8.7	9.2	10.6	9.7	10.2	10.9	9.6	10.2	11.5	10.7	11.1
14	10.5	8.9	9.6	11.0	9.6	10.2	11.4	9.9	10.6	11.6	10.7	11.2
15	10.2	8.9	9.6	11.2	9.7	10.4	11.0	9.8	10.4	11.5	10.7	11.1
16	10.9	9.2	10.0	10.9	9.7	10.2	10.8	10.0	10.4	11.5	10.6	11.1
17	10.5	9.3	9.8	10.8	9.8	10.2	10.9	10.2	10.5	11.7	10.8	11.3
18	10.4	9.0	9.7	11.4	9.3	10.3	10.6	9.9	10.2	11.6	10.8	11.3
19	10.7	9.0	9.9	10.9	9.7	10.2	11.7	10.1	10.6	11.5	10.7	11.2
20	10.8	9.5	10.1	10.9	9.8	10.3	11.3	9.9	10.5	11.5	10.8	11.3
21	10.5	9.3	9.9	10.4	9.9	10.2	11.3	10.0	10.7	11.4	10.7	11.1
22	10.8	9.2	9.9	11.1	9.8	10.3	11.2	10.3	10.7	11.8	10.8	11.4
23	10.9	9.4	10.1	10.9	10.0	10.4	11.1	10.0	10.6	11.8	10.7	11.1
24	10.9	9.3	10.1	10.4	9.6	10	11.3	10.0	10.6	11.5	10.3	11.0
25	10.3	9.6	9.8	11.0	10.0	10.4	11.4	9.9	10.7	11.4	10.8	11.1
26	10.9	9.7	10.2	10.7	9.9	10.3	11.6	10.4	11.0	11.4	10.8	11.2
27	10.9	9.5	10.3	11.2	9.9	10.6	10.9	10.1	10.5	11.5	10.8	11.2
28	11.2	9.6	10.4	11.0	10.1	10.5	11.2	10.1	10.7	11.6	10.9	11.3
29	11.0	9.8	10.4	10.6	10.1	10.4	11.5	10.3	10.7	11.4	10.7	11.0
30	11.1	10.1	10.6	10.7	9.6	10.1	11.4	9.7	10.5	11.3	10.7	11.1
31	---	---	---	11.0	10.0	10.4	11.2	9.4	10.2	---	---	---
<b>Month</b>	11.2	8.7	9.8	11.4	9.3	10.3	11.7	9.4	10.5	11.8	9.8	11.1

	Max	Min	Mean
<b>Year</b>	12.1	7.2	9.7